

ALTERNATE SOUNDINGS

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AL.SO

DYNAX²

MK4 version
From serial 7000 (October 2012)



“*Dynamic sound shaper*”

USER MANUAL

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Subject to the conditions set forth below, for one year after the original purchase date of the product, AL.SO will repair the product free of charge in the event of a defect in materials or workmanship, according to the French laws.

All repairs are made in Factory, packaging, shippement and insurances in charge of the machine owner.

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AL.SO's ROHS and CE Compliance

With respect to Article 2.1 and 3 of the RoHS Directive, the Dynax falls under category 9. Equipment in this category are completely exempt from requirements of the RoHS Directive. Nevertheless, the Dynax is compliant with the RoHS Directive.

The unit is compliant to CE rules. Power supply is compliant to CEI/EN 61558-2-6

IMPORTANT:

Operating the unit before the unit is totally warm may cause the Dynax not to work at its full potential.

Plug the unit in well ahead of the time you will need it. One hour is a good start.

Warming of the meter section can take one hours too. You may have to use a screwdriver to perform a more accurate metering calibration after warming time. The temperature rise is no cause for concern, but allowing for some airflow is always a benefit from a long-term reliability standpoint.

It is strongly recommended that the Dynax be left powered-on for fixed installations.

Front panel legend markings reflect approximate values, which may vary from unit to unit due to components tolerances, environmental conditions, normal aging, etc.

THIS UNIT CONTAINS NO USER-SERVICEABLE PARTS.

Warning : risk of electric shock if cover is removed.

Opening cover void your guaranty.

In the event of unit operational failure, contact AL.SO service and technical support or your geographic authorized distributor. Please be prepared to describe in detail the exact problem that the unit is experiencing, including : failure conditions, system signal flow, exact failure manifestation, events and actions leading to the failure, etc. Also, be able to quickly provide contact information and the unit's serial number.

It is highly recommended that customers do not attempt to troubleshoot their own units or have them serviced at unauthorized repair centers. Opening the case of the unit will void the AL.SO warranty. These measures also act to protect AL.SO intellectual property so that AL.SO may continue to design high-end professional audio peripherals.

In any case, always refer to this manual, or contact your authorized dealer.

List is available at : www.alsoaudio.com

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Thanks for buying DYNAX2.

This Analog Dynamic Processor is manufactured in France, Europe.

This original machine has been designed by Olivier Bolling in july 2003 and first mono version machines produced in june 2006.

Description

Dynax2 is a dynamic processor designed for mixing, tracking and audio mastering.

The unit use a very low distortion circuit allowing to act directly on the signal shape without adding “built in / native” distortion.

The Dynax2 aims at both compressing and limiting musical material from the most transparent to the most harsh and powerfull way.

The Dynax signal flow only uses high end selected components including the followings :

DC servo input stages

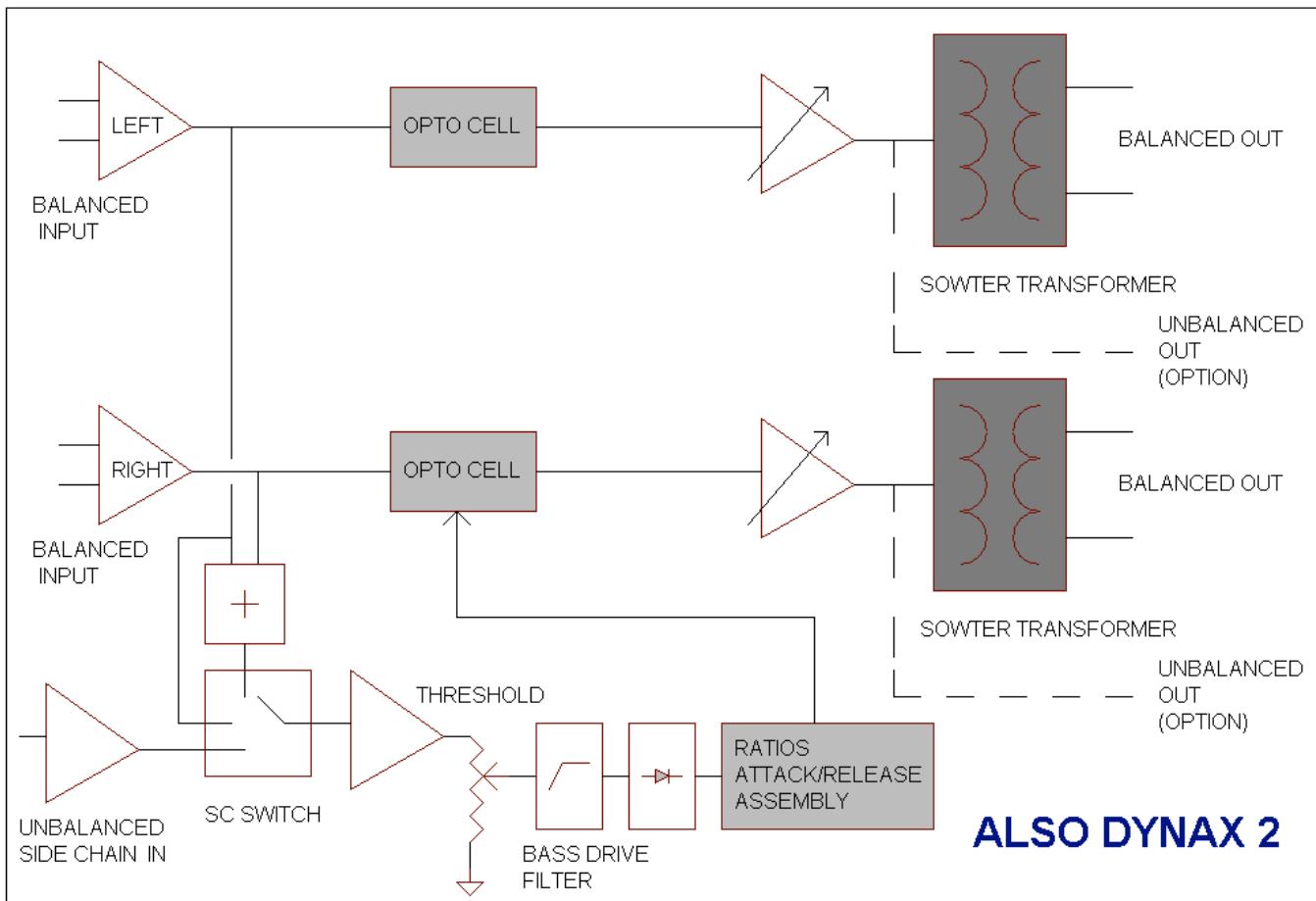
Optical gain reduction unit

Hi end audio output transformers from SOWTER company (UK).

The unit also have fully balanced inputs and outputs.

Some units have no output transformers and are electronically balanced (option).

BY PASS is a real hardware By Pass (relaying input to output), allowing you to compare original and processed signal.



Supplies

The unit must always be grounded .This is an important point regarding safety !

Unit could operate on 115VAC or 230 VAC.

Please, always verify the 110/230V switch position on rear panel!

Contact an authorized technician in order to be sure of this setting before connecting to mains.

Don't panic anyway, generally if machine set at 230V on 110V mains, no damage ...
And if set at +110V with 230V mains, normally fuse makes its job!

Fuses are 200mA Slow Blow for 230V operation and could be kept for 110 V.

Connections

The unit also have fully balanced inputs and outputs (Pin 2 = hot).

External side chain input is unbalanced on a 6.35" Jack connector.

Input Left could be used as mono input in case of processing mono signal (in this case, use SC control Left or ext).

Controls

POWER:

When up, this switch powers on the unit.

When normal operating Vu meter is lighted (normal when "in", dimmed when By Pass).

BY PASS:

This function is a real hardware bypass.

When in By Pass mode (upper position), meter light is dimmed .Meter shows gain reduction or input levels.

This function permits you to prepare a "off- line" gain reduction .

Meter lighted, the sound is processed...

Please, note that if DYNAX2 is not powered, the machine is in By Pass mode.

VU/Red

VU-L meters L channel output (except if machine is in By Pass mode: input).

VU-R meters R channel output (except if machine is in By Pass mode: input).

GR monitors gain reduction.

Over modulation cleverly turns the blue hue of the meter to a strong red .

Turning to Red light allows you to see over levels at output stage even when you're metering GR .

At power up, needle is not in his roght position.

This is normal, the unit shall warm.

The needle when warm is on the orange dot position.

If not, you could perform meter "0" position.
Place the machine in your rack and allow 3 hours warming.

Limiting position (ratio) : no signal , Vu selector on GR, adjust the left screw you can find left above the GR/VU selector. Position at +1dB.

Antidyna position (ratio) : no signal , Vu selector on GR, adjust the right screw you can find left above the GR/VU selector. Position at +1dB.

DYNAX" M" (mastering version).
No Antidyna, perform just for Limiting position.

Side Chain (SC)

This button allows the user to choose which signal will drive the compression between the three following settings :

- L : the L input signal will drive the compression for both channels /
- L + R : a real mono summation (from the inputs) of both L and R drives the compression. The perfect stereo mode...
- Ext : rear jack input (unbalanced mono) drives the compression.

Bass drive

The bass drive setting consists in a high pass filter into side chain path that gives the user the power to act on the side chain signal command only. No filtering on audio path. For example, with this command, it is possible to avoid the low bass string from a bass guitar to always trigger compression!

300, 200 and 100 are the HPF amount that drives the compression...

Full is for full audio band (no filtering).

Ratios :

Dynax2 previously offers 3 ratios (Limiter, Brickwall and Antidyna). Diagrams shown at attack and release fastest and for understanding.

Dynax2 is a progressive knee dynamic processor.

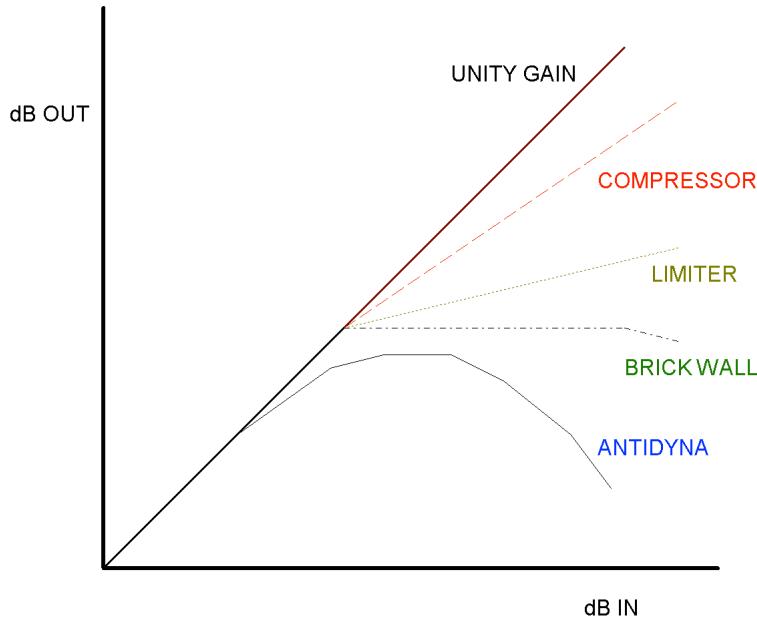
From serial number 5000, DYNAX2 has a soft Compressor ratio.

This is useful for vocals and mastering!

*Due to the particular Dynax Knne and the low distortion unit, we can consider :
COMPRESSOR is around 4:1*

LIMITER: 10 :1

BRICKWALL: Infinite:1



**ALSO DYNAX2
RATIOS**

Warning !

Because of overcompression curve in the ANTIDYNA mode, we had to compensate the loss of level (up to about 40dB gain reduction) by a special setting that apply a gain of **+10dB** at the output stage .

This permits you to compare different ratios while processing and achieve high output levels.

Remember this particular point and take care about your ears and monitors !

COMPRESSION

This setting control the amount of gain reduction.

This button is stepped controlled.

The more you turn clock wise, the more you compress.

SENSITIVITY:

There is a sensitivity switch on rear panel.

Normal position is engaged.

If you need less sensitivity (high level mastering for exemple), this switch should be at "off" position).

MAKE UP:

Make Up is output gain. As DYNAX2 is a forward compressor, it not affect compression.

Warning : Output gain stage is based on a mic preamp design, using selected opamp and transformer. You have a lot of gain .Unity is performed at around 3 when in Limiter mode.

You can set both L and R output levels.

Basics settings:

Mastering:Compressor or Limiter mode, Bass Drive at 200, Attack: 5, release: 6, turn Compression knob in order to achieve 2/3 dB .

Electric bass: Brick Wall mode, Bass drive at 200 or 300, attack : 4, Release:2 or 7
Snare (usual): Limiter mode, Bass drive :Full, attack :3;Release: 5Compression in order to achieve 3 to 10 dB.

Snare (fast mode) Brickwall mode, Bass drive : Full, Attack: Fully Counter Clock Wise (CCW), Release: CCW.Perform an at least 12 dB reduction (and try harder, change carefully release and attack!).

Antidyna: start with compression at maximum, attack and release fastest.

Change Compression in order to have the good pumping effect .Try other time constants settings...`Note Antidyna could be performed only if you provide high levels.

Of course you can use any settings you want. Music is the only way..

Technical specifications

Sometimes (we can say generaly), there is a lot of difference between what people claims and what we can measure at the office.

In addition, we say that we are creating musical instruments and that the relationship between measurement and listening is not so crystal clear!

So, the only way to know if a machine suits your taste and make the job you want is to test it by yourself.

For sure DYNAX technical specifications are the good ones, regarding distorsion ,noise , dynamic range and bandwith !

MK4 version: what's new?

First version was DYNAX, it was mono.A very few units were produced.

2nd version was DYNAX2 , stereo.

3nd version was DYNAX2 with replacement of Jensen 990C AOP by a new one, with better common mode rejection and less noise.

4nd version was only developed for DYNAXM (sharing PCB with DYNAX2).

Cases, PCB etc... have changed but the original sound is still there!

Please, listen.

Music is the only way.

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